

ELECTROACTIVE POLYMER ROTARY CLUTCH MOTORS

ABSTRACT OF THE DISCLOSURE

5 The present invention relates to mechanical-electrical power conversion systems.
The systems comprise one or more electroactive polymers that convert between electrical and
mechanical energy. When a voltage is applied to electrodes contacting an electroactive
polymer, the polymer deflects. This deflection may be converted into rotation of a power
shaft included in a motor. Repeated deflection of the polymer may then produce continuous
10 rotation of the power shaft.

Abstract